August 20, 2003
Todd Blocher
Saint Clair Press
1203 E. St. Clair Street
Indianapolis, IN 46202

Re: Registered Construction and Operation Status,
097-15088-00160

Dear Mr. Blocher.:

The application from Saint Clair Press, received on July 22, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following commercial printing operation, located at 1203 East Saint Clair Street, Indianapolis, Indiana, is classified as registered:

(a) One (1) Kimori 640C, six-color, lithographic printing press (identified as EU-640C), with a maximum throughput capacity of 510 feet per minute and a maximum printing width of 39.75 inches, emissions exhausted through stack S-02, and installed in July 1987.

(b) One (1) Kimori 640T, six-color, lithographic printing press (identified as EU-640T), with a maximum throughput capacity of 588.84 feet per minute and a maximum printing width of 39.75 inches, emissions exhausted through stack S-01, and installed in September 1997.

(c) One (1) Heidelberg 240, two-color, lithographic printing press (identified as EU-240), with a maximum throughput capacity of 470 feet per minute and a maximum printing width of 39.75 inches, emissions exhausted inside the building, and installed in April 2001.

(d) One (1) Heidelberg CD102, six-color lithographic press (identified as EU-640CD), with a maximum throughput capacity of 390 feet per minute and a maximum printing width of 40 inches, emissions exhausted through stack S-01, and installed in December 2002.

(e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including one (1) boiler with maximum heat input capacity of 2 MMBtu per hour, constructed after September 1983. [326 IAC 6-2-4]

(f) Other activities with particulate matter (PM) emissions less than 5 pounds per hour and 25 pounds per day, including paper trimming and application of drying powder (cornstarch) to wet print for lithographic printing presses EU-640C, EU-640T, EU-240, and EU-640CD. [326 IAC 6-3-2(e)(2)] [40 CFR 52, Subpart P]

(g) Other activities with volatile organic compound (VOC) emissions less than 3 pounds per hour and 15 pounds per day, including plate and film processing and adhesive applications.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 2-6 (Emission Reporting), the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be

received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

2. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

   (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

   (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

3. Pursuant to 326 IAC 6-2-4, particulate matter (PM) emissions shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

   Where Pt = Pounds of PM emitted per million Btu(lb/mmBtu) heat input. Pt is equivalent to 0.91 lbs/mmBtu at maximum heat input capacity.
   Q = Total source maximum operating capacity rating in mmBtu per hour heat input. Q is equivalent to 2.0 MMBtu per hour in the case that all three boilers were operating simultaneously.

   However, for sources that have a maximum operating capacity (Q) less than 10 MMBtu per hour, the particulate matter emissions shall not exceed 0.6 lbs per MMBtu. Since the 2 MMBtu per hour is the only boiler located at this source, the particulate matter emissions shall be limited 0.6 lbs per MMBtu.

4. Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emission rate from the trimming and drying powder application process, not already regulated by 326 IAC 6-1 or any NSPS which has a maximum process weight rate less than 100 pounds per hour, shall not exceed 0.551 pounds per hour.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

and

Office of Environmental Services
Air Quality Management Section, Compliance Data Group
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to OAQ and OES if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely Originally Signed by John B.Chavez

John B. Chavez, Administrator

aco

cc: File, Marion County
Air Compliance, Matt Mosier
IDEM, Mindy Hahn
Permits, Nikki Olsen

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3).

Company Name:
Address:
City:
Authorized individual:
Phone #:
Registration #:

I hereby certify that St. Clair Press is still in operation and is in compliance with the requirements of Registration 097-15088-00160.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Saint Clair Press
Source Location:	1203 East Saint Clair Street, Indianapolis, Indiana 46202
County:	Marion
SIC Code:	2752
Operation Permit No.:	097-15088-00160
Permit Reviewer:	Nikki Olsen

The Office of Environmental Services (OES) has reviewed an application from Saint Clair Press relating to the operation of a commercial printing plant.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) Kimori 640C, six-color, lithographic printing press (identified as EU-640C), with a maximum throughput capacity of 510 feet per minute and a maximum printing width of 39.75 inches, emissions exhausted through stack S-02, and installed in July 1987.

(b) One (1) Kimori 640T, six-color, lithographic printing press (identified as EU-640T), with a maximum throughput capacity of 588.84 feet per minute and a maximum printing width of 39.75 inches, emissions exhausted through stack S-01, and installed in September 1997.

(c) One (1) Heidelberg 240, two-color, lithographic printing press (identified as EU-240), with a maximum throughput capacity of 470 feet per minute and a maximum printing width of 39.75 inches, emissions exhausted inside the building, and installed in April 2001.

(d) One (1) Heidelberg CD102, six-color lithographic press (identified as EU-640CD), with a maximum throughput capacity of 390 feet per minute and a maximum printing width of 40 inches, emissions exhausted through stack S-01, and installed in December 2002.

Insignificant Activities

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including one (1) boiler with maximum heat input capacity of 2 MMBtu per hour, constructed after September 1983. [326 IAC 6-2-4]

(b) Other activities with particulate matter (PM) emissions less than 5 pounds per hour and 25 pounds per day, including paper trimming and application of drying powder (cornstarch) to wet print for lithographic printing presses EU-640C, EU-640T, EU-240, and EU-640CD. [326 IAC 6-3-2(e)(2)]

(c) Other activities with volatile organic compound (VOC) emissions less than 3 pounds per hour and 15 pounds per day, including plate and film processing and adhesive applications.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment.*

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Administrator that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on July 22, 2003.

Emission Calculations

Emission calculations for this source can be found in Appendix A, pages 1 through 4.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	negligible
PM-10	negligible
SO_2	0.0
VOC	20.42
CO	0.0
NO_x	0.0

HAP's	Potential To Emit (tons/year)
xylene	0.07
2-butoxy ethanol	0.66
naphthalene	0.03
cumene	0.05
ethylene glycol	0.00
TOTAL	0.81

(d) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than five (5) tons per year and less than twenty-five (25) tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants is less than twenty-five (25) tons per year. Therefore, the source is registered and subject to the provisions of 326 IAC 2-5.1-2.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the emission data included in the application.

Pollutant	Potential To Emit (tons/year)
PM	negligible
PM-10	negligible
SO_2	0.0
VOC	20.42
CO	0.0
NO_x	0.0

HAP's	Potential To Emit (tons/year)
xylene	0.07
2-butoxy ethanol	0.66
naphthalene	0.03
cumene	0.05
ethylene glycol	0.00
TOTAL	0.81

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO_2	maintenance attainment
NO_2	attainment
Ozone	maintenance attainment
CO	attainment
Lead	unclassifiable

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Marion County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	negligible
PM10	negligible
SO_2	0.0
VOC	20.42
CO	0.0
NO_x	0.0
Single HAP	0.66
Combination HAPs	0.81

(a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(1) The boiler is not subject to the NSPS, 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) because the boiler has a maximum heat input capacity less than 10 MMBtu per hour and was constructed before 1989.

(2) This source is not subject to the requirements of the NSPS, 40 CFR 60, Subpart QQ - Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing (326 IAC 12) because this source uses only lithographic printing presses.

(3) This source is not subject to the NSPS, 40 CFR 60, Subpart RR - Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations (326 IAC 12), because this source does not manufacture pressure sensitive tape or labels.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (Section 112(j) of the Clean Air Act (40 CFR 63.50 through 63.56) applicable to this source because the source has agreed to limit HAP emissions to below the major source thresholds.

(1) This source is not subject to the requirements of the NESHAPs, Subpart KK - National Emission Standards for the Printing and Publishing Industry (326) IAC 14) because the source operates only offset sheetfed lithographic presses. The NESHAP, 40 CFR 63, Subpart KK applies only to flexographic and rotogravure printing presses.

State Rule Applicability - Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1 because it does not have the potential to emit more than 10 tons per year of any single HAP or more than 25 tons per year of any combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and is located in Marion County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1(Opacity Limitations)

The Opacity regulation 326 IAC 5-1 is generally applicable to all point sources of emissions. Since the source is located in Marion County, and is not located in the areas of Marion County referred to in 326 IAC 5-1-5, pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1 (Non-Attainment Area Limitations)

Since the source does not have the potential to emit greater than 100 tons per year of particulate matter, or actual emissions of greater than 10 tons per year of particulate matter, and it is not one of the sources listed in 326 IAC 6-1-12, 326 IAC 6-1 does not apply.

State Rule Applicability - Printing Presses (EU-640T, EU-640C, EU-240, EU-640CD)

326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

The printing presses are not subject to 326 IAC 8-1-6 because each press does not have the potential to emit more than 25 tons of VOCs per year. Any change or modification to this operation that would increase the potential to emit VOC greater than 25 tons per twelve (12) consecutive month period shall require prior approval from IDEM, OAQ and OES before any such change may occur.

326 IAC 8-2-5 (Surface Coating Emission Limitations)

The printing presses are not subject to the requirements of 326 IAC 8-2-5 (Paper Coating Operations) because these presses are lithographic and this rule applies only to web coating and saturation processes of paper, plastic, metal foil, and pressure sensitive tapes and labels.

326 IAC 8-5-5 (Graphic Arts Operations)

The printing presses are not subject to the requirements of 326 IAC 8-5-5 (Graphic Arts Operations) because these presses are lithographic and this rule applies only to packing rotogravure, publication rotogravure, and flexographic printing presses.

State Rule Applicability - Insignificant Activities

Boiler

326 IAC 6-2-4 (Particulate Emission Limitations from Sources of Indirect Heating)

The 2 MMBtu per hour, natural gas-fired boiler is subject to the PM limits in 326 IAC 6-2-4. This regulation applies because the boilers are used for indirect heating and were all installed after September 21, 1983. Pursuant to 326 IAC 6-2-4, particulate matter (PM) emissions shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where Pt = Pounds of PM emitted per million Btu(lb/mmBtu) heat input. Pt is equivalent to 0.91 lbs/mmBtu at maximum heat input capacity.

Q = Total source maximum operating capacity rating in mmBtu per hour heat input. Q is equivalent to 2.0 MMBtu per hour in the case that all three boilers were operating simultaneously.

However, for sources that have a maximum operating capacity (Q) less than 10 MMBtu per hour, the particulate matter emissions shall not exceed 0.6 lbs per MMBtu. Since the 2 MMBtu per hour is the only boiler located at this source, the particulate matter emissions shall be limited 0.6 lbs per MMBtu.

Trimming and Drying Powder Application

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emission rate from the trimming and drying powder application process, not already regulated by 326 IAC 6-1 or any NSPS which has a maximum process weight rate less than 100 pounds per hour, shall not exceed 0.551 pounds per hour.

Film and Plate Processing Operation

326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

The film and plate processing operation is not subject to 326 IAC 8-1-6 because this facility does not have the potential to emit more than 25 tons of VOCs per year. Any change or modification to this operation that would increase the potential to emit VOC greater than 25 tons per twelve (12) consecutive month period shall require prior approval from IDEM, OAQ and OES before any such change may occur.

Conclusion

This manufacturer of custom casework shall be subject to the conditions of the attached proposed Registration 097-15088-00160.

Appendix A

CHEMICAL USAGE AND VOC/HAP EMISSIONS

St. Clair Press, 1203 East Clair Street, Indianapolis, IN, 46202, R097-15088-00160, Reviewer N. Olsen

A. 6C 40" Komori (640C) Sheetfed Press with An Aqueous Coater																	
a. Chemical Usage & PTE of VOC Emissions																	
Name of Chemicals	Unit	Max. Use per yr/shift	VOC Content % or lb/gal		Max. Usage /shift-/yr		VOC		Emission Factor*		Maximum # of Shifts		PTE of VOC Emissions	
1. Sheetfed Inks	lb	40000.00	17.24%	VOC =	40000.00	x	17.24%	x	5%			=	**344.87**	**lbs/year**
2. Overprint Varnishes	lb	10000.00	35.00%	VOC =	10000.00	x	35.00%	x	5%			=	**175.00**	**lbs/year**
3. 268-467 Aqueous Coating	lb	12000.00	2.80%	VOC =	12000.00	x	2.80%	x	100%			=	**336.00**	**lbs/year**
4. 268-503 Aqueous Coating	lb	25000.00	1.80%	VOC =	25000.00	x	1.80%	x	100%			=	**450.00**	**lbs/year**
5. 268-805 Aqueous Coating	lb	12000.00	5.00%	VOC =	12000.00	x	5.00%	x	100%			=	**600.00**	**lbs/year**
6. 268-861 Aqueous Coating	lb	8000.00	8.50%	VOC =	8000.00	x	8.50%	x	100%			=	**680.00**	**lbs/year**
7. 268-999 Aqueous Coating	lb	5000.00	0.00%	VOC =	5000.00	x	0.00%	x	100%			=	**0.00**	**lbs/year**
8. 268-3005 Aqueous Coating	lb	15000.00	3.83%	VOC =	15000.00	x	3.83%	x	100%			=	**574.50**	**lbs/year**
9. Pressmax HAD 61 Fount. Add.	gal	0.15	6.88	VOC =	0.15	x	6.88	x	100%	x	1095	=	**1130.04**	**lbs/year**
10. Pressmax 20 Fount. Concent.	gal	0.40	1.88	VOC =	0.40	x	1.88	x	100%	x	1095	=	**823.44**	**lbs/year**
11. Powerklene WM	gal	0.10	6.69	VOC =	0.10	x	6.69	x	100%	x	1095	=	**732.56**	**lbs/year**
12. A-124B B/R wash	gal	0.40	6.74	VOC =	0.40	x	6.74	x	100%	x	1095	=	**2952.12**	**lbs/year**
13. B-146 B/R Wash	gal	0.40	5.25	VOC =	0.40	x	5.25	x	100%	x	1095	=	**2299.50**	**lbs/year**
14. Superklene 1 IC	gal	0.10	5.04	VOC =	0.10	x	5.04	x	100%	x	1095	=	**551.88**	**lbs/year**
15. Metering Roller Cleaner	gal	0.15	5.25	VOC =	0.15	x	5.25	x	100%	x	1095	=	**862.31**	**lbs/year**
16. Revitol Plate Cleaner	quart	0.01	0.28	VOC =	0.01	x	0.28	x	100%	x	1095	=	**3.07**	**lbs/year**
PTE of VOC emissions @ 365 days per year				**=**	**12515.28**	**lbs/year**		**=**	**6.26**	**tons/year**		**=**	**34.29**	**lbs/day**

b. Hazardous Air Pollutants Emissions Calculations (Using the Maximum Chemical Usage rate depicted above)								
Name of Chemicals	CAS #							
1. Xylene	**1330-20-7**		Emissions =	43.21	lbs/year	=	0.0216	ton/year
2. 2-Butoxy Ethanol	**111-76-2**		Emissions =	391.28	lbs/year	=	0.1956	ton/year
3. Naphthalene	**91-20-8**		Emissions =	15.51	lbs/year	=	0.0078	ton/year
4. Cumene	**98-82-8**		Emissions =	30.32	lbs/year	=	0.0152	ton/year
5. Ethylene Glycol	**107-21-1**		Emissions =	0.44	lbs/year	=	0.0002	ton/year
6. Total HAPs Emissions	=	**480.32**	**lbs/year** =	**0.24**	**tons/year**			

B. 6C 40" Komori (640T) Sheetfed Press with An Aqueous Coater																	
a. Chemical Usage & PTE of VOC Emissions																	
Name of Chemicals	Unit	Max. Use per yr/shift	VOC Content % or lb/gal		Max. Usage /shift-/yr		VOC		Emission Factor*		Maximum # of Shifts		PTE of VOC Emissions	
1. Sheetfed Inks	lb	35000.00	17.24%	VOC =	35000.00	x	17.24%	x	5%			=	**301.76**	**lbs/year**

CHEMICAL USAGE AND VOC/HAP EMISSIONS
St. Clair Press, 1203 East Clair Street, Indianapolis, IN, 46202, R097-15088-00160, Reviewer N. Olsen

2. Overprint Varnishes	lb	8000.00	35.00%	VOC =	8000.00	x	35.00%	x	5%			=	**140.00**	**lbs/year**
3. 268-467 Aqueous Coating	lb	12000.00	2.80%	VOC =	12000.00	x	2.80%	x	100%			=	**336.00**	**lbs/year**
4. 268-503 Aqueous Coating	lb	25000.00	1.80%	VOC =	25000.00	x	1.80%	x	100%			=	**450.00**	**lbs/year**
5. 268-805 Aqueous Coating	lb	10000.00	5.00%	VOC =	10000.00	x	5.00%	x	100%			=	**500.00**	**lbs/year**
6. 268-861 Aqueous Coating	lb	7000.00	8.50%	VOC =	7000.00	x	8.50%	x	100%			=	**595.00**	**lbs/year**
7. 268-999 Aqueous Coating	lb	4000.00	0.00%	VOC =	4000.00	x	0.00%	x	100%			=	**0.00**	**lbs/year**
8. 268-3005 Aqueous Coating	lb	12000.00	3.83%	VOC =	12000.00	x	3.83%	x	100%			=	**459.60**	**lbs/year**
9. Pressmax HAD 61 Fount. Add.	gal	0.15	6.88	VOC =	0.15	x	6.88	x	100%	x	1095	=	**1130.04**	**lbs/year**
10. Pressmax 20 Fount. Concent.	gal	0.40	1.88	VOC =	0.40	x	1.88	x	100%	x	1095	=	**823.44**	**lbs/year**
11. Powerklene WM	gal	0.10	6.69	VOC =	0.10	x	6.69	x	100%	x	1095	=	**732.56**	**lbs/year**
12. A-124B B/R wash	gal	0.40	6.74	VOC =	0.40	x	6.74	x	100%	x	1095	=	**2952.12**	**lbs/year**
13. B-146 B/R Wash	gal	0.40	5.25	VOC =	0.40	x	5.25	x	100%	x	1095	=	**2299.50**	**lbs/year**
14. Superklene 1 IC	gal	0.10	5.04	VOC =	0.10	x	5.04	x	100%	x	1095	=	**551.88**	**lbs/year**
15. Metering Roller Cleaner	gal	0.15	5.25	VOC =	0.15	x	5.25	x	100%	x	1095	=	**862.31**	**lbs/year**
16. Revitol Plate Cleaner	quart	0.01	0.28	VOC =	0.01	x	0.28	x	100%	x	1095	=	**3.07**	**lbs/year**
PTE of VOC emissions @ 365 days per year				**=**	**12137.27**	**lbs/year**		**=**	**6.07**	**tons/year**		**=**	**33.25**	**lbs/day**

b. Hazardous Air Pollutants Emissions Calculations (Using the Maximum Chemical Usage rate depicted above)

Name of Chemicals	**CAS #**												
1. Xylene	**1330-20-7**		Emissions =	43.21	lbs/year	=	0.0216	ton/year					
2. 2-Butoxy Ethanol	**111-76-2**		Emissions =	391.28	lbs/year	=	0.1956	ton/year					
3. Naphthalene	**91-20-8**		Emissions =	15.51	lbs/year	=	0.0078	ton/year					
4. Cumene	**98-82-8**		Emissions =	30.32	lbs/year	=	0.0152	ton/year					
5. Ethylene Glycol	**107-21-1**		Emissions =	0.44	lbs/year	=	0.0002	ton/year					
6. Total HAPs Emissions	**=**	**480.32**	**lbs/year =**	**0.24**	**tons/year**								

C. 6C 40" Heidelberg (640CD) Sheetfed Press with An Aqueous Coater

a. Chemical Usage & PTE of VOC Emissions

Name of Chemicals	**Unit**	**Max. Use per yr/shift**	**VOC Content % or lb/gal**		**Max. Usage /shift-/yr**		**VOC**		**Emission Factor***		**Maximum # of Shifts**		**PTE of VOC Emissions**	
1. Sheetfed Inks	lb	30000.00	17.24%	VOC =	30000.00	x	17.24%	x	5%			=	**258.65**	**lbs/year**
2. Overprint Varnishes	lb	6000.00	35.00%	VOC =	6000.00	x	35.00%	x	5%			=	**105.00**	**lbs/year**
3. 268-467 Aqueous Coating	lb	12000.00	2.80%	VOC =	12000.00	x	2.80%	x	100%			=	**336.00**	**lbs/year**
4. 268-503 Aqueous Coating	lb	25000.00	1.80%	VOC =	25000.00	x	1.80%	x	100%			=	**450.00**	**lbs/year**
5. 268-805 Aqueous Coating	lb	12000.00	5.00%	VOC =	12000.00	x	5.00%	x	100%			=	**600.00**	**lbs/year**
6. 268-861 Aqueous Coating	lb	8000.00	8.50%	VOC =	8000.00	x	8.50%	x	100%			=	**680.00**	**lbs/year**

CHEMICAL USAGE AND VOC/HAP EMISSIONS
St. Clair Press, 1203 East Clair Street, Indianapolis, IN, 46202, R097-15088-00160, Reviewer N. Olsen

7. 268-999 Aqueous Coating	lb	5000.00	0.00%	VOC =	5000.00	x	0.00%	x	100%			=	**0.00**	**lbs/year**
8. 268-3005 Aqueous Coating	lb	15000.00	3.83%	VOC =	15000.00	x	3.83%	x	100%			=	**574.50**	**lbs/year**
9. Pressmax HAD 61 Fount. Add.	gal	0.15	6.88	VOC =	0.15	x	6.88	x	100%	x	1095	=	**1130.04**	**lbs/year**
10. Pressmax 20 Fount. Concent.	gal	0.40	1.88	VOC =	0.40	x	1.88	x	100%	x	1095	=	**823.44**	**lbs/year**
11. Powerklene WM	gal	0.10	6.69	VOC =	0.10	x	6.69	x	100%	x	1095	=	**732.56**	**lbs/year**
12. A-124B B/R wash	gal	0.40	6.74	VOC =	0.40	x	6.74	x	100%	x	1095	=	**2952.12**	**lbs/year**
13. B-146 B/R Wash	gal	0.40	5.25	VOC =	0.40	x	5.25	x	100%	x	1095	=	**2299.50**	**lbs/year**
14. Superklene 1 IC	gal	0.10	5.04	VOC =	0.10	x	5.04	x	100%	x	1095	=	**551.88**	**lbs/year**
15. Metering Roller Cleaner	gal	0.15	5.25	VOC =	0.15	x	5.25	x	100%	x	1095	=	**862.31**	**lbs/year**
16. Revitol Plate Cleaner	quart	0.01	0.28	VOC =	0.01	x	0.28	x	100%	x	1095	=	**3.07**	**lbs/year**
PTE of VOC emissions @ 365 days per year				**=**	**12359.06**	**lbs/year**		**=**	**6.18**	**tons/year**		**=**	**33.86**	**lbs/day**

b. Hazardous Air Pollutants Emissions Calculations (Using the Maximum Chemical Usage rate depicted above)

Name of Chemicals	**CAS #**												
1. Xylene	**1330-20-7**		Emissions =	43.21	lbs/year	=	0.0216	ton/year					
2. 2-Butoxy Ethanol	**111-76-2**		Emissions =	391.28	lbs/year	=	0.1956	ton/year					
3. Naphthalene	**91-20-8**		Emissions =	15.51	lbs/year	=	0.0078	ton/year					
4. Cumene	**98-82-8**		Emissions =	30.32	lbs/year	=	0.0152	ton/year					
5. Ethylene Glycol	**107-21-1**		Emissions =	0.44	lbs/year	=	0.0002	ton/year					
6. Total HAPs Emissions	**=**	**480.32**	**lbs/year =**	**0.24**	**tons/year**								

D. 2C 40" Heidelberg (240) Sheetfed Press

a. Chemical Usage & PTE of VOC Emissions

Name of Chemicals	**Unit**	**Max. Use per yr/shift**	**VOC Content % or lb/gal**		**Max. Usage /shift-/yr**		**VOC**		**Emission Factor***		**Maximum # of Shifts**		**PTE of VOC Emissions**	
1. Sheetfed Inks	lb	15000.00	17.24%	VOC =	15000.00	x	17.24%	x	5%			=	**129.32**	**lbs/year**
2. Overprint Varnishes	lb	0.00	35.00%	VOC =	0.00	x	35.00%	x	5%			=	**0.00**	**lbs/year**
3. 268-467 Aqueous Coating	lb	0.00	2.80%	VOC =	0.00	x	2.80%	x	100%			=	**0.00**	**lbs/year**
4. 268-503 Aqueous Coating	lb	0.00	1.80%	VOC =	0.00	x	1.80%	x	100%			=	**0.00**	**lbs/year**
5. 268-805 Aqueous Coating	lb	0.00	5.00%	VOC =	0.00	x	5.00%	x	100%			=	**0.00**	**lbs/year**
6. 268-861 Aqueous Coating	lb	0.00	8.50%	VOC =	0.00	x	8.50%	x	100%			=	**0.00**	**lbs/year**
7. 268-999 Aqueous Coating	lb	0.00	0.00%	VOC =	0.00	x	0.00%	x	100%			=	**0.00**	**lbs/year**
8. 268-3005 Aqueous Coating	lb	0.00	3.83%	VOC =	0.00	x	3.83%	x	100%			=	**0.00**	**lbs/year**
9. Pressmax HAD 61 Fount. Add.	gal	0.10	6.88	VOC =	0.10	x	6.88	x	100%	x	1095	=	**753.36**	**lbs/year**
10. Pressmax 20 Fount. Concent.	gal	0.15	1.88	VOC =	0.15	x	1.88	x	100%	x	1095	=	**308.79**	**lbs/year**

CHEMICAL USAGE AND VOC/HAP EMISSIONS

St. Clair Press, 1203 East Clair Street, Indianapolis, IN, 46202, R097-15088-00160, Reviewer N. Olsen

11. Powerklene WM	gal	0.02	6.69	VOC =	0.02	x	6.69	x	100%	x	1095	=	**146.51**	**lbs/year**
12. A-124B B/R wash	gal	0.15	6.74	VOC =	0.15	x	6.74	x	100%	x	1095	=	**1107.05**	**lbs/year**
13. B-146 B/R Wash	gal	0.15	5.25	VOC =	0.15	x	5.25	x	100%	x	1095	=	**862.31**	**lbs/year**
14. Superklene 1 IC	gal	0.04	5.04	VOC =	0.04	x	5.04	x	100%	x	1095	=	**220.75**	**lbs/year**
15. Metering Roller Cleaner	gal	0.05	5.25	VOC =	0.05	x	5.25	x	100%	x	1095	=	**287.44**	**lbs/year**
16. Revitol Plate Cleaner	quart	0.01	0.28	VOC =	0.01	x	0.28	x	100%	x	1095	=	**3.07**	**lbs/year**
PTE of VOC emissions @ 365 days per year				**=**	**3818.60**	**lbs/year**		**=**	**1.91**	**tons/year**		**=**	**10.46**	**lbs/day**

b. Hazardous Air Pollutants Emissions Calculations (Using the Maximum Chemical Usage rate depicted above)

Name of Chemicals	**CAS #**													
1. Xylene	**1330-20-7**		Emissions =	12.89	lbs/year	=	0.0064	ton/year						
2. 2-Butoxy Ethanol	**111-76-2**		Emissions =	147.28	lbs/year	=	0.0736	ton/year						
3. Naphthalene	**91-20-8**		Emissions =	6.20	lbs/year	=	0.0031	ton/year						
4. Cumene	**98-82-8**		Emissions =	8.72	lbs/year	=	0.0044	ton/year						
5. Ethylene Glycol	**107-21-1**		Emissions =	0.44	lbs/year	=	0.0002	ton/year						
6. Total HAPs Emissions	**=**	**175.10**	**lbs/year**	**=**	**0.09**	**tons/year**								
E. Facility-Wide VOC Emissions	**=**	**40830.21**	**lbs/year**	**=**	**20.42**	**tons/year**	**=**	**628.16**	**lbs/day**					
F. Total Hazardous Air Pollutants Emissions														
1. Xylene	**1330-20-7**	**142.53**	**lbs/year**	**=**	**0.07**	**tons/year**	**=**	**2.19**	**lbs/day**					
2. 2-Butoxy Ethanol	**111-76-2**	**1321.12**	**lbs/year**	**=**	**0.66**	**tons/year**	**=**	**20.32**	**lbs/day**					
3. Naphthalene	**91-20-8**	**52.72**	**lbs/year**	**=**	**0.03**	**tons/year**	**=**	**0.81**	**lbs/day**					
4. Cumene	**98-82-8**	**99.68**	**lbs/year**	**=**	**0.05**	**tons/year**	**=**	**1.53**	**lbs/day**					
5. Ethylene Glycol	**107-21-1**	**1.77**	**lbs/year**	**=**	**0.00**	**tons/year**	**=**	**0.03**	**lbs/day**					